

**REMARKS****I. Status of the Claims**

Claims 1-40 are pending in the application. Claims 1-13, 15-27, 32, 33, 35, 37, 39 and 40 are allowed. Applicants appreciate the Examiner's allowance of claims 1-13, 15-27, 32, 33, 35, 37, 39 and 40. Claims 14, 28-31, 34, 36 and 38 are rejected. In view of the following remarks, Applicants request reconsideration of the application and allowance of all remaining claims.

**II. The 6/24/04 Amendment to the Specification Was Proper**

The Examiner objects under 35 U.S.C. § 132 to the amendments to the specification filed by Applicants on 6/24/04, arguing that the amendments introduced new matter into the disclosure. The Examiner asserts the requirement that Applicants must cancel such alleged new matter. The objection is respectfully traversed, and Applicants earnestly request that the Examiner reconsider the objection.

The amendments to the specification filed by Applicants on 6/24/04 are fully in compliance with the applicable requirements. This point is made clear by the relevant section of the MPEP. Specifically, MPEP § 608.01(p)I.A.2 states as follows:

“The filing date of any application wherein essential material is improperly incorporated by reference to a foreign application or patent or to a publication will not be affected because of the reference. In such a case, the Applicant will be required to amend the specification to include the material incorporated by reference.”

While Applicants note that the Examiner has failed to support the argument that material added by the amendment filed 6/24/04 is essential material, it is irrelevant whether or not the

amendment involved essential material. Even if some or all of the material added to the specification by the amendment was essential material, Applicants are entitled to amend the specification to recite such material expressly, as made clear by the MPEP section quoted above. A Declaration executed by the undersigned in support of the amendment accompanies this paper.

Accordingly, the objection is in error and should be withdrawn.

**III. Each of claims 14, 29-31 and 34 Meets the  
Enablement Requirement of 35 U.S.C. § 112, First Paragraph**

Claims 14, 29-31, and 34 are rejected under 35 U.S.C. § 112, first paragraph. The Examiner asserts that the specification does not reasonably provide enablement for alpha, beta unsaturated carbonyl compounds. Applicants respectfully traverse the rejection.

The specification fully meets the enablement requirement of 35 U.S.C. § 112, first paragraph for each of the independent claims 14, 29, 31 and 34. The specification has been modified to expressly incorporate relevant material from WO 85/03510. As discussed above, the 6/24/04 amendment to the specification to expressly recite relevant material from WO 85/03510 was proper and must be considered in determining that there is support for the subject claims. The text of WO 85/03510 copied into the specification provides numerous examples of carbonyls beyond carboxylic acids, for example, amides (e.g., acrylamide, methacrylamide, fumaramide, etc.), carboxylic acids (e.g., methacrylic acid, itaconic acid, fumaric acid, etc.) and esters and aminoalkyl esters of unsaturated carboxylic acids that satisfy the element “alpha,beta unsaturated carbonyl compound.” Accordingly, the specification fully supports and enables “alpha, beta unsaturated carbonyl compounds.”

In addition, the specification provides numerous examples of how to make and use such compounds. See Examples I-VII on pages 22-37 of the specification. It is well established that the enablement requirement can be satisfied by at least one method for making and using the claimed invention that bears a reasonable correlation to the entire scope of a claim. The present specification teaches the use of and discloses numerous examples meeting the claim element “alpha, beta unsaturated carbonyl compound,” and the person of ordinary skill in the art would not be required to perform undue experimentation.

Accordingly, the rejection is improper and should be withdrawn.

**IV. Claims 28-30, 36 and 38 are Patentable over Fan et al.**

Claims 28-30, 36 and 38 are rejected under § 103(a) over Fan et al., US 4,599,390 ("Fan et al."). Applicants respectfully traverse the rejection.

Claim 28 is patentable over Fan et al. because nowhere does Fan et al. teach or suggest water soluble hydrophobe associative polymer having functionality including hydrophobes associative with one another in a saturated aqueous solution of an alkali metal salt of a carboxylic acid. There is no teaching or suggestion that Fan et al.'s flocculation polymers would or could or should have such hydrophobe associative properties. To the contrary, Fan et al. expressly states that its polymer is not soluble in high salt solutions. Thus, claim 28 is patentable over Fan et al.

Fan et al. also fails to teach or suggest the subject matter of claims 29, 30, 36 or 38. Specifically, in each case Fan et al. fails to teach or suggest each and every element of the claim. Fan et al. fails to teach or suggest the use of a hydrophobe reactant selected from acrylic esters, methacrylic esters and mixtures thereof, as required by claims 29, 30, 36 and 38. The Examiner acknowledges that "a specific example of the use of a hydrophobic acrylic or methacrylic ester is not disclosed." In the face of this deficiency of Fan et al. the Examiner asserts obviousness, merely citing that Fan et al. involves flocculation agents. But the Examiner does not provide a reasoned analysis as to why it would be obvious from Fan et al. to use hydrophobic acrylic or methacrylic ester based merely on Fan et al.'s use of its polymers as flocculation agents. Absent a teaching or suggestion of the hydrophobic acrylic or methacrylic esters recited by subject claims, Fan et al. cannot render the subject claims obvious.

Further, nothing in Fan et al. or elsewhere has been identified by the Examiner that would motivate one of skill in the art to modify the Fan et al. polymers to incorporate a hydrophobic acrylic or methacrylic ester. Contrary to the Examiner's assertion, Fan et al. does not teach or suggest that polymers modified to include acrylic esters, methacrylic esters or mixtures thereof are useful as flocculating agents, given that Fan et al. makes no reference to such a polymer in any way.

Claim 30 depends from claim 29 and is patentable over Fan et al. for the reasons stated above and for the additional reason that claim 30 recites that the hydrophobe reactant of claim 29 has a -COOR group wherein the R moieties, in the reaction product, are hydrophobes associative with one another in a saturated aqueous solution of an alkali metal salt of a carboxylic acid. As discussed above, Fan et al. provides no teaching or suggestion of such polymers or that the Fan et al. polymers have such property. Thus, claim 30 is patentable over Fan et al.


Applicants request withdrawal of the rejection.

**VI. Conclusion**

Applicants respectfully request entry of the foregoing amendments and reexamination of the application.

Respectfully submitted,  
Benton et al.

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Dated

  
Peter D. McDermott (Reg. No. 29,411)  
Attorney for Applicants  
Banner & Witcoff, LTD.  
28 State St. - 28<sup>th</sup> Floor  
Boston, MA 02109  
Phone: 617.720.9600  
Fax: 617.720.9601